

WHAT IS CLAIMED:

1. A method for creating one or more ink jet chambers, the method comprising the steps of:

(a) providing a substrate having a thermal element covered with substantially one type of uncured photo-imageable material;

(b) providing a first mask spanning the thermal element which creates both masked and unmasked uncured photo-imageable regions;

(c) exposing the unmasked photo-imageable region;

(d) providing a second mask covering at least a portion of the thermal element;

(e) exposing a portion of the remaining unexposed photo-imageable region for forming an output nozzle;

(f) curing the exposed portions of the photo-imageable material;
and

(g) removing all the remaining uncured photo-imageable material for creating the ink jet chamber.

2. The method as in claim 1, wherein step (e) includes creating an ink jet cartridge chamber.

3. The method as in claim 1 further comprising the step of creating one more members in the ink jet cartridge chamber.

4. The method as in claim 3, wherein the one or more members is capable of providing a plurality of functions.

5. The method as in claim 3, wherein the functions include support, filtering, and baffling.

6. The method as in claim 1 further comprising the steps of creating a plurality of individualized ink jet chambers on the substrate.

7. The method as in claim 6 further comprising the step of varying the exposure intensity spanning the photo-imageable materials for varying thickness of a chamber roof and depth of the ink jet cartridge chamber.

8. The method as in claim 6 further comprising the step of varying the exposure time spanning the photo-imageable materials for varying thickness of a chamber roof and depth of the ink jet cartridge chamber.

9. The method as in claim 6 further comprising the step of varying the exposure dose spanning the photo-imageable materials for varying thickness of a chamber roof and depth of the ink jet cartridge chamber.

10. The method as in claim 6 further comprising is a step of varying a gradient of the exposure spanning the photo imaging material for a plurality of geometric shaped structures

11. The method as in claim 1, wherein the exposure wavelength is selected to control a depth of penetration into the photo-imageable material.

12. The method as in claim 11, wherein the first exposure is at a higher wavelength than the second exposure.

13. The method as in claim 11, wherein the second exposure contains a same wavelength as the first exposure in addition to a second lower wavelength.